

WE CLAIM:

1. A method for retrieving and executing one or more diagnostics modules together capable of testing a single hardware component within a computer system, the method comprising:

receiving a request to perform a diagnostics test on the hardware component;
identifying the one or more diagnostics modules necessary to test the hardware component;
retrieving the one or more diagnostics modules from a remote server computer;
installing the one or more diagnostics modules on the computer system; and
executing the one or more diagnostics modules on the computer system to test the hardware component.

2. The method of Claim 1, wherein retrieving the one or more diagnostics modules from a remote server computer comprises retrieving one or more diagnostics modules containing program code for testing only the hardware component.

3. The method of Claim 2 further comprising retrieving from the remote server computer a data file containing data identifying the one or more diagnostics modules necessary to test the hardware component.

4. The method of Claim 3, wherein identifying the one or more diagnostics modules comprises identifying based on the contents of the data file the one or more diagnostics modules necessary to test the hardware component.

5. The method of Claim 4, wherein the data file further comprises data encoding instructions for installing the one or more diagnostics modules on the computer system.

6. The method of Claim 5, wherein installing the one or more diagnostics modules on the computer system comprises installing the one or more diagnostics modules according to the instructions contained in the data file.

7. A computer-readable medium having stored thereon computer-readable instructions which, when executed by a computer, cause the computer to perform the method of Claim 1.

8. A computer-controlled apparatus capable of performing the method of Claim 1.

9. A method for locating, retrieving, installing, and executing a diagnostics module capable of testing a single component of a computer system in response to a user request, the method comprising:

receiving a user request to perform a diagnostic on the component;

in response to the request, locating and retrieving a diagnostics module capable of testing the component from a remote server computer;

installing the diagnostics module on the computer system; and

executing the diagnostics module to test for a failure or potential failure of the component.

10. The method of Claim 9, wherein the user request is received via a web page.

11. The method of Claim 10, wherein a control object is embedded in the web page and wherein the control object is operative to communicate with the server computer to locate and retrieve the diagnostics module and further operative to execute the diagnostics modules.

12. The method of Claim 11, wherein the diagnostics module comprises computer-executable program code executable only in conjunction with the control module.

13. The method of Claim 12, wherein the server computer is operative to authorize execution of the diagnostics module in response to a request from the control module.

14. A computer-readable medium having stored thereon computer-readable instructions which, when executed by a computer, cause the computer to perform the method of Claim 9.

15. A computer-controlled apparatus capable of performing the method of Claim 9.

16. A system for executing a diagnostics module for testing a single component of a client computer system, comprising:

a client computer operative to receive a user request to perform a diagnostic on the component, to retrieve a diagnostics module capable of testing the component from a remote server computer in response to the request, and to execute the diagnostics module to test for a failure or potential failure of the component; and

a server computer operative to store the diagnostics module, to receive requests from the client computer for the diagnostics module, and to transmit the diagnostics module to the client computer in response to a request.

17. The system of Claim 16, wherein the server computer is further operative to store and to transmit to the client computer a data file containing data identifying the one or more diagnostics modules necessary to test the hardware component and wherein the client computer is further operative to identify the diagnostics module necessary to test the component based on the contents of the data file.

18. The system of Claim 17, wherein the client computer is further operative to transmit to the server computer a request for authorization to execute the diagnostics module prior to execution and wherein the server computer is further operative to determine whether execution of the diagnostics module is authorized and to provide a response to the client computer either authorizing or prohibiting the execution of the diagnostics module.

19. The system of Claim 18, wherein the server computer is further operative to transmit to the client computer a configuration file identifying entry points at the server computer for retrieving the diagnostics module and for requesting authorization to execute the diagnostics module.

20. The method of Claim 19, wherein the client computer is further operative to retrieve the diagnostics module and to request authorization to execute the diagnostics module utilizing the entry points identified in the configuration file.